

Joint Project Agreement
entered into by
Medical University of South Carolina
and the
South Carolina Department of Natural Resources
and the
University of Charleston, South Carolina
and the
U.S. Department of Commerce
through the
National Institute of Standards and Technology
and the
National Oceanic and Atmospheric Administration
for the
MARINE ENVIRONMENTAL HEALTH RESEARCH LABORATORY
at the
S. C. Marine Resources Center

Charleston, South Carolina

GENERAL INFORMATION: The U. S. Department of Commerce, through the National Oceanic and Atmospheric Administration and the National Institute of Standards and Technology in conjunction with the South Carolina Department of Natural Resources, the University of Charleston, and the Medical University of South Carolina, were charged with developing a partnership to operate collaboratively the Marine Environmental Health Research Laboratory, (MEHRL), located at the South Carolina Marine Resources Center, Charleston, South Carolina.

All five Federal and State partners will mutually benefit from the state-of-the-art MEHRL facility. The current partners are: the National Oceanic and Atmospheric Administration, National Ocean Service Coastal Center for Environmental Health and Biomolecular Research at Charleston (**CCEHBR**), hereinafter referred to as **NOS**; the National Institute of Standards and Technology, hereinafter referred to as **NIST**; the Medical University of South Carolina, hereinafter referred to as **MUSC**; the South Carolina Department of Natural Resources, hereinafter referred to as **SCDNR**; and the University of Charleston, South Carolina, hereinafter referred to as **UCSC**. Collectively, the parties to this Agreement will be referred to as the Cooperators.

The mission of MEHRL is to provide the science to sustain, protect, and restore coastal ecosystems emphasizing linkages between environmental condition and human health. To achieve this mission requires a new paradigm for conducting environmental research, including: (1) the development of multi-institutional, collaborative research programs that member institutions could not develop nor conduct alone; (2) a modern research laboratory designed to conduct research that currently cannot be conducted in the region and that promotes frequent interaction among scientists, including the sharing of material resources; and (3) the requirement that mission-oriented government scientists from state and Federal agencies collaborate with academic scientists to identify and understand the factors and mechanisms affecting marine environmental quality, including linking the condition of the marine environment to human and marine organism health.

No longer can one scientist working in one discipline, or at one institution, independently provide solutions to the coastal environmental and public health problems of this nation. An interdisciplinary team approach is required. Team research will be the theme of the MEHRL.

NOS is providing a 78,000 gross square feet laboratory for the MEHRL adjacent to the CCEHBR, at the South Carolina Marine Resources Center. This facility has been specifically designed to facilitate collaborative, interdisciplinary research and the support of team research. The UCSC and the MUSC will provide the academic-based researchers, and the NOS, NIST, and SCDNR will provide the mission-oriented researchers who will staff the MEHRL. The cumulative and combined expertise and skills of the Cooperators provide the resources that will allow the research teams to address issues (e.g., linking human and marine organism health to marine environmental quality) that previously could not be addressed in the region. The MEHRL facility and expertise are designed to establish an international center of excellence for assessing marine environmental quality and linking it to human health.

The five partners entering into this Agreement will continue collaborative research activities initiated under an August 15, 1994 Memorandum of Agreement (MOA) among four of the partners. (*The National Institute of Standards and Technology was not a partner to the 1994 agreement.*) That MOA also established a general framework for building and operating a research facility. The 1994 Agreement will be superseded by this Agreement.

I PURPOSE AND SCOPE

The purpose of this Agreement is to form a joint cooperative entity at the South Carolina Marine Resources Center comprised of the five Cooperators that will facilitate research collaboration and provide for administration and operation of the MEHRL. This Agreement also describes the responsibilities and authorities of the Cooperators forming the MEHRL organizational structure and identifies the processes that will be used to allocate space and other facilities. The Agreement is of mutual benefit to all parties and is essential to the efficient operations of the MEHRL and furtherance of all Cooperators programs.

This Agreement focuses on providing the mechanisms for ensuring the cooperation and participation of the Cooperators to achieve the MEHRL vision and mission. The Cooperators expect the MEHRL to be completed in January 2001. An overview of the research capabilities that will exist at the MEHRL is provided below:

1. Scientists will be able to safely conduct research on hazardous toxic biological materials and infectious marine chemical agents by using biological safety containment laboratories (BSL3). Similar facilities are currently not available in the region.
2. Research capabilities will range from ecotoxicology to biomolecular studies to structural chemistry.
3. The MEHRL will house a major marine cryogenic specimen banking facility, which will be unique in this region. This state-of-the-art preservation facility will provide scientists the opportunity to monitor and document the presence of previously unknown pollutants and their trends.
4. Because of national quality assurance programs conducted at the MEHRL and state-of-the-art scientific analytical equipment, the sensitivity and quality of chemical measurements will be vastly improved.
5. The facilities and equipment available in the MEHRL will provide Cooperator scientists the tools to obtain a better understanding of the biochemical and molecular basis of marine plant and animal physiology and pathology (diseases and harmful algal blooms). These facilities and the associated research will also facilitate natural product development, including the creation of new drugs and products.

6. Using MEHRL environmental rooms, marine organisms can be safely studied and challenged with chemical and biological agents under controlled conditions to determine acute, sub-lethal, and chronic effects. This information will contribute to predicting the risk of various man-made and naturally occurring compounds and environmental changes to marine resources.

7. MEHRL aquatic production facilities will provide capabilities for culturing and holding a wide variety of marine organisms for integrated research investigations.

II REFERENCES AND AUTHORITIES

NIST has programmatic authority to enter into this Agreement pursuant to its organic legislation, 15 U.S.C. § 272 *et seq.* NOAA has programmatic authority to enter into this Agreement pursuant to 16 U.S.C. § 742a *et seq.* (Fish and Wildlife Act of 1956), 7 U.S.C. § 1621 *et seq.* (Agricultural Marketing Act of 1946), 33 U.S.C. § 883a *et seq.*, 33 U.S.C. § 1442, 16 U.S.C. § 1456c, Section 201(c) of P.L. 102-567, and Title VI of P.L. 105-383. NIST and NOAA are also authorized to enter into this Agreement pursuant to the Department of Commerce's Joint Project Authority 15 U.S.C. § 1525. The MUSC, SCDNR, and UCSC represent that they have authority under their respective charters or state laws to enter into this Agreement by executing the Agreement through their signatory officials. The parties agree that the Agreement is in their mutual interest and that the costs of the Agreement are equitably apportioned. NOS and NIST have determined that this project cannot be done at all or as effectively without the Cooperators' participation and that this project is essential to a Department of Commerce program. The Cooperators will mutually benefit from this Agreement through scientific collaboration and cooperation at the MEHRL. The South Carolina Cooperators have contributed an extended lease of land for construction of the MEHRL facility at essentially no cost to Commerce. Commerce is contributing the facility that will be used for the MEHRL project.

The Department of Commerce Appropriation Act for 1994 provided funds to NOAA for facility planning and design in general, P.L. No. 103-121, 107 Stat. 1153, 1170. Public Law 104-91 dated *January 3, 1996 provided authority for the lease as follows:*
"(a) Fort Johnson - The Secretary of Commerce, through the Under Secretary of Commerce for Oceans and Atmosphere, is authorized to construct on land to be leased from the State of South Carolina, a facility at Fort Johnson, South Carolina, provided that the annual cost of leasing the required lands does not exceed one dollar."

Since Fiscal Year (FY) 1994, Congress has appropriated \$19,183,000 in the NOAA Procurement, Acquisition, and Construction account for the construction of MEHRL as listed below. In addition to these funds, NIST has contributed \$4,775,000 to the construction of MEHRL. These funds were appropriated as follows:

FY 1994 Appropriations Conference Report: "[C]onference agreement includes \$683,000 for planning and design of a joint Federal and State Marine Laboratory to be located at the marine resources center at Fort Johnson, South Carolina."

FY 1995 Appropriations Conference Report: "Another \$7,500,000 is included. . . to initiate expansion of the National Marine Fisheries Service Southeastern Laboratory. This new facility will house NOAA, State of South Carolina Marine Resources, and other agency personnel."

FY 1996 Appropriations Conference Report: "The Conferees have provided \$3,000,000 for the NMFS Southeast laboratory" (House Report 104-378).

FY 1997 Appropriations Conference Report: "\$5,000,000 to complete the NMFS Southeast laboratory project" (House Report 104-863).

FY 1998 Appropriations Conference Report: "The conferees agree to transfer management and operation of the Charleston laboratory from NMFS to the National Ocean Service as proposed by the Senate" (Ed.: see Senate Report 105-48, below.) (House Report 105-405).

FY 1998 Senate Appropriations Committee Report: "The Committee recommendation transfers the administration of the National Marine Fisheries Service Southeast Laboratory from NMFS to the National Ocean Service. . . . The Committee expects the NOS to continue existing cooperative laboratory activities with State and local governments, and the academic community. The Committee requests that as part of this transfer the NOS assume responsibility for monitoring and administering the construction of the new joint Federal/State marine environmental research facility at Fort Johnson" (Senate Report 105-48).

FY 1999 Appropriations Conference Report (In table form): "Fort Johnson Lab--\$3,000,000" (House Report 105-825). For further guidance refer to Senate Report 105-235, wherein it states: "\$3,000,000 is for equipment, such as the sea water system and piping, necessary to complete the Fort Johnson Marine Environmental Laboratory."

Recognizing that construction was nearing completion, and in anticipation of the start-up of operations for the MEHRL, Congress in FY 2000 began allocating MEHRL operating funds by appropriating \$1,000,000 to the NOAA Operations, Research, and Facilities account (See House Report 106-479).

III RESPONSIBILITIES OF THE PARTIES

This Agreement sets forth a cooperative working arrangement for the collaborative research endeavors and operation of MEHRL located at the South Carolina Marine Resources Center, in Charleston, SC. A MEHRL Executive Board shall be formed to provide oversight of program activities and provide direction on other facility and research related issues. This Executive Board shall be the final authority on all matters related to the operations and programs of the MEHRL. The Science Board will be responsible for ensuring that the science conducted within the MEHRL is consistent with the MEHRL mission. The Cooperators shall work together and participate in the joint use of MEHRL. Each of the Cooperators will:

1. Provide one representative each to serve on the MEHRL Executive Board and the Science Board.
2. Assist in defining the scientific mission and research strategy for the MEHRL by participation on the Science Board.
3. Assist in defining day-to-day operations including finance and budget, administration, facilities management, safety, environmental compliance, and security.
4. Contribute to the costs for operating and maintaining MEHRL. These contributions will include in-kind contributions.
5. Involve appropriate scientists and faculty from its staff in collaborative research at the MEHRL facility.
6. Provide research and training opportunities for Masters, Doctoral, and Post-Doctoral students from UCSC and MUSC as well as visiting scientists from other institutions.
7. Foster cooperative research and educational opportunities and participate in reviews of research activities.

The MEHRL organizational structure is provided in Figure 1 and includes the following key management components: 1) MEHRL Executive Board, 2) MEHRL Science Board, 3) MEHRL Laboratory Manager, and 4) MEHRL Operational Committees. All of the Board and Committee members will be either Federal, State, local or tribal government employees.

A. MEHRL Executive Board

The MEHRL Executive Board shall consist of the NOS Assistant Administrator, the Director of NIST, the Director of SCDNR, and the Presidents of MUSC and UCSC, or their designated representatives, to ensure the scientific programs conducted within MEHRL are consistent with the MEHRL mission and their respective institutional mandates, to periodically review MEHRL scientific and laboratory operations, and to resolve disputes that cannot be resolved by other organizational components. The MEHRL Executive Board shall be the policymaking and authoritative management unit for MEHRL and may, at its discretion, delegate any specific function to other MEHRL organizational elements. The Chair of the Executive Board, which initially shall be elected from among its membership by simple majority vote, will rotate annually among the Cooperators. At no time, however, shall the chair of the Executive Board and the Chair of the Science Board represent one and the same cooperator. The specific duties of the Executive Board will be to:

- Establish a management system under which the MEHRL will operate.
- Provide a process for dispute resolution not otherwise covered by Section VI.
- Appoint representatives to the Science Board.
- Charge the Science Board with developing a long-range research plan and approve the Science Board's annual plan for MEHRL research.
- Initially elect by simple majority vote the Chair of the Science Board. The Science Board will select subsequent Science Board Chairs.
- Approve the annual operating budget based on recommendations from the Science Board and the Laboratory Manager.
- Oversee all management, oversight, and administrative functions including those specifically delegated to any other MEHRL organizational element.

- Prepare and submit annual requests for Federal and/or State appropriations to support the ongoing MEHRL mission.

B. MEHRL Science Board

The Science Board will be responsible for ensuring that the science conducted within the MEHRL is consistent with the MEHRL mission. For the first year of MEHRL operations, the Executive Board will elect, by simple majority vote, the Chair of the Science Board. Subsequently, the Science Board will be responsible for selecting, by simple majority vote, its own Chair, which shall rotate regularly among the Cooperators. At no time, however, shall the Chair of the Executive Board and the Chair of the Science Board represent one and the same cooperator. The Chair of the Science Board will report to the Executive Board on its activities and the success of the MEHRL science programs. Specific responsibilities of the Science Board will include:

- Developing the long-term research vision/strategy for the MEHRL, consistent with the MEHRL mission as approved by the Executive Board.
- Defining what scientific research will be conducted within the MEHRL including the development of long range research and development plans.
- Developing criteria for space allocation and mechanisms for reallocating and revoking space.
- Resolving day-to-day operational disputes that cannot be resolved by the Laboratory Manager.
- Identifying and building interdisciplinary research teams to address high priority Requests for Proposals and other potential funding sources.
- Ensuring the science conducted at the MEHRL is of a high quality, including requiring the development and implementation of a Quality Assurance process which is consistent with each cooperating institution's policies.
- Fostering interdisciplinary and inter-institutional research and education.
- Conducting periodic reviews of MEHRL scientific programs, including the use of external peer reviews as needed.

C. MEHRL Laboratory Manager

NOS will select, hire, and evaluate, with input from the Science Board, a Laboratory Manager to run the day-to-day operations of the MEHRL. This Laboratory Manager will be a senior level NOS employee located at the MEHRL. The Laboratory Manager, under guidance of the Science Board and overseen by the Executive Board, will be responsible for management and protection of the research platform, including the security, safety, administration, and well-being of staff. Specific responsibilities of the Laboratory Manager will include:

- Implementing the direction of the Science Board pertaining to office and laboratory space, in order to facilitate the goals of the MEHRL and other instructions provided by the MEHRL Executive Board.
- Setting up and administering a system by which NOS may receive and expend funds from each Cooperator and via extramural grants and contracts for operations and maintenance needs. The Laboratory Manager will coordinate this system with Central Administrative Support Center and the Commerce Office of General Counsel.
- Setting up and administering a system to receive funds for research.
- Implementing the processes for MEHRL proposal development as established by the Science Board.
- Managing/scheduling shared laboratory facilities, equipment, and other resources based on guidance provided by the Science Board. This will include resolving most day-to-day disputes over such issues as scheduling for shared resources (i.e., bioassay laboratories, equipment, and culture facilities) according to the guidance provided by the Executive and Science Boards. Disputes and grievances that cannot be resolved by the Laboratory Manager will be forwarded to the Science Board.
- Maintaining records of facility and equipment usage and preparing annual reports of use for consideration by the Executive and Science Boards.
- Preparing annual reports of MEHRL accomplishments, including publications, patents, and other products.
- Interacting with scientists and students from all Cooperators to facilitate effective, efficient, and safe operations.

- Reviewing and implementing plans, processes, and protocols recommended by the various operational committees and as approved by the Science Board and/or Executive Board. These will include, but not be limited to, the following:
 - an animal welfare program.
 - facility and grounds maintenance
 - greeting and reception of visitors, including minimum clerical support and conduct of MEHRL tours.
 - assignment of conference rooms.
 - mail distribution and materials shipments.
 - handling/disposal of hazardous or controlled materials.
 - onsite communications systems, including computer and telephone networks.
 - institutional safety, security, and staff training
- Other administrative/operational functions as prescribed by the Science and Executive Boards.

D. Laboratory Operational Committees

The Laboratory Operational Committees (Finance & Budget; Administration & Management; Physical Plant; and Safety, Environmental Compliance, and Security) will advise the Laboratory Manager on operational procedures to be developed and implemented for the MEHRL. These committees will include one representative from each Cooperator and will be responsible for developing guidance, including Standard Operating Procedures and manuals, and recommendations for:

- cooperative procurement
- staffing
- equipment inventory/ownership
- facility and grounds maintenance
- laboratory safety compliance and associated activities (hazardous waste disposal, safety issues and training, radioisotope use and NOS license addendum, proper use of containments facilities and BSL3 space).

--building security

--other matters as requested by the Executive Board, the Science Board, and/or the Laboratory Manager.

IV PERIOD OF PERFORMANCE

Subject to the availability of funding by all the Cooperators, this Agreement will be for the period beginning on the date of approval (signature) by all Cooperators until September 30, 2047, unless terminated prior to that time in accordance with Section VIII. However, the Agreement must be reviewed at least once every three years to determine the need for amendment or revision. Subject to the mutual agreement of all Cooperators, the Agreement may be extended for additional years beyond September 30, 2047, the expiration of the land lease agreement, 067WCF97021 dated October 23, 1997. Such extension is dependent on the concurrent extension of the land lease agreement.

Notwithstanding any other law, for any property and improvements to that property located at the Marine Resources Center on James Island near the city of Charleston, South Carolina, that are (1) acquired by the Secretary of Commerce from the State of South Carolina for use as the Marine Environmental Health Research Laboratory; and (2) determined by the Secretary to be excess property, legislation shall be sought for the full reversion of said property and improvements thereto to the State of South Carolina.

V FUNDING

Subject to Section II, the Cooperators to this Agreement expect to provide NOS with a number of financial benefits including in-kind match, which will be of mutual benefit and equitably apportioned. All Cooperators' commitments and obligations under Joint Project Agreement; however, are subject to the availability of funds. This Agreement allows the contribution of funds, services, and other items of value to NOS from the other Cooperators for conducting joint research at MEHRL and to include NOS' operational and maintenance costs for operations of the MEHRL as a cooperative research facility.

VI DISPUTE RESOLUTION

Should disagreement arise on the interpretation of the provisions of this Agreement, or amendments and/or revisions thereto, that cannot be resolved at the operating level (e.g., by the Laboratory Manager and/or the Science Board), the area(s) of disagreement shall be stated in writing by each party and presented to the other parties for consideration. If agreement on interpretation is not reached within thirty days, the parties shall forward the written presentation of the disagreement to the MEHRL Executive Board for collective resolution by unanimity of opinion of the MEHRL Executive Board. It is the intent of all the Cooperators that the Executive Board resolve all issues and any disagreements without outside intervention.

VII OTHER PROVISIONS

Shared Occupancy of NOS Facility. All Cooperators agree that the sharing of the MEHRL will be on a cooperative and non-interfering basis, i.e., the work of any Cooperator sharing the facility shall not be hampered by any of the others, nor shall a supervisory-employee relationship exist among the Cooperators. Each Cooperator will take full financial and operational responsibility for its own employees physically located in or holding positions in MEHRL. Nothing herein is intended to conflict with current NOS or any of the Cooperators' directives. If the terms of this Agreement are inconsistent with the existing directives of any of the agencies entering into this Agreement, then those portions of this Agreement which are determined to be inconsistent shall be invalid; but the remaining terms and conditions not affected by the inconsistency shall remain in full force and effect. This Agreement, in no way, restricts the Cooperators from participating in similar activities or arrangements with other public or private agencies, organizations, or individuals. No individual cooperating institution to this Agreement may commit MEHRL space and equipment resources independently without the written approval of the MEHRL Executive Board. This will have no effect on NOS' operation and maintenance funds for MEHRL. At the first opportunity for review of the Agreement, all necessary changes will be accomplished by either an amendment to this Agreement or by entering into a new agreement, whichever is deemed expedient to the interest of all Cooperators.

Authorization and Title. NOS authorizes the Cooperators to occupy the MEHRL and to utilize the NOS-owned facilities, for the purpose of performing research and educational work herein described. Title to the MEHRL shall remain in the possession of NOS. Title to the MEHRL shall not be affected by the incorporation or attachment thereof to any property not owned by the NOS, nor shall the components of the MEHRL or any part thereof be or become a fixture or lose its identity as personal property, by reason of affixation to any realty. The MEHRL shall, unless otherwise provided herein, be used only in the performance of this Agreement.

Maintenance, Repair, Protection and Administration. NOS shall maintain, repair, and protect MEHRL property and those components of the MEHRL considered essential for its operation. Real property and improvements thereto shall be maintained by NOS in accordance with normal real property and building maintenance standards. Maintenance of Cooperator's institutional property, while in the custody of the Cooperators, shall be performed by the Cooperators according to the manufacturer's recommendations.

Improvements and Alterations. Improvements or alterations to MEHRL made by any of the Cooperators are subject to prior approval by the MEHRL Executive Board. Unless the Cooperator(s) and NOS agree otherwise by separate contract, the cost of all improvements or alterations to the MEHRL shall be the sole responsibility of the Cooperator(s) and all Cooperators shall benefit from the improvements or alterations. Upon expiration or termination of this Agreement, the Cooperators(s) agree to restore the premises to the condition that existed upon the arrival of the Cooperators and/or their agents, normal wear and tear excepted. The Cooperator(s) may, subject to MEHRL Executive Board approval; abandon some or all of the Cooperator(s) provided fixtures, alterations or improvements. NOS shall not be required to compensate the Cooperators for any such abandonment.

Liability for Loss (First Party Property Coverage). Each Cooperator will be responsible for the negligent act, omissions, and liabilities of its own employees to the extent allowed by law. In the event of loss or destruction of, or damage to the MEHRL, the Cooperator(s) shall notify the MEHRL Laboratory Manager, and provide such details as may be required, together with advice regarding planned repair and/or replacement.

NOS Access. NOS shall have access at all reasonable times to its entire premises.

Use and Disposal of NOS Owned Property. The Cooperators are responsible for ensuring that NOS owned property is used for authorized purposes only and that property, which is damaged, destroyed or not being used is reported to NOS. Each Cooperator has the right to remove their equipment from the MEHRL, although it is expected that equipment required to conduct cooperative research will not be removed without consent of the MEHRL Executive Board following advice from the Science Board. Cooperators may manage their individual pieces of equipment consistent with the appropriate inventory control procedures at their respective institutions.

Assigns and Successors. Any reorganization, restructuring, reconstitution, or change in name or mission by one or several of the Cooperators shall not serve to invalidate this Agreement. This Agreement shall remain valid, in force, and recognized by all Cooperators, their assigns or successors, until such time as altered or dissolved as provided elsewhere in this Agreement.

Conditions of Occupancy:

1. **Costs of Operation.** NOS will have the responsibility for operation and maintenance of the base facility, MEHRL. All operational costs for supplies, materials, or services to carry out its programs shall be the shared responsibility of the Cooperators, although it is anticipated that base operating costs for the MEHRL will be provided by Federal funds appropriated in the NOS budget.

2. **Cooperators Presence.** The Cooperators agree to occupy and use the MEHRL in cooperation with NOS to perform research for the period of the Agreement, and further agree that failure to do so will constitute a breach of the Agreement. A breach is failure to abide by the terms and conditions of this Agreement resulting in forfeiture of rights described herein.

3. **Licenses, Codes and Regulations.** The Cooperators, insofar as allowed by law and without expense to NOS, shall be responsible for obtaining any necessary licenses and permits, and for complying with applicable Federal, State and Municipal laws, codes, and regulations, in connection with carrying out this Agreement. To the extent that Federal law conflicts with state or local law, NOS must comply with Federal law. The Cooperators are not relieved of any such responsibilities by virtue of occupancy and operation of a Federal facility. Even though NOS holds a lease to the land, to the extent authorized by Federal law, it has released authority for inviting local, city and state law enforcement authorities to act on this property.

4. Occupational Safety and Health. Each employer, i.e., all Cooperators, including NOS, is responsible for the occupational safety and health of its respective employees. Employers are also required to comply with all applicable state and/or Federal requirements for occupational safety and health, including injury/illness record keeping and reporting requirements. To the extent that Federal law conflicts with state or local law, NOS must comply with Federal law. All Cooperators' employees shall also comply with all occupational safety and health requirements of the U. S. Department of Commerce whenever working on or with NOS property. Although the U. S. Department of Commerce will retain title to the MEHRL, all Cooperators will be responsible for the safe and healthful working conditions of the MEHRL. All Cooperators should inform each other about their equipment and material that may expose or potentially expose their respective employees to safety and/or health hazards. All Cooperators are responsible for informing or training employees about the material or use of equipment. Each Cooperator should report hazards to the other Cooperators to ensure such hazards are eliminated or controlled.

5. Cooperators Liability. Any potential liability for NOS and NIST resulting in any way from the performance of the Agreement will be controlled by Federal law, as appropriate, including the Federal Torts Claim Act. The South Carolina Tort Claims Act, 15-78-10, *et seq.*, South Carolina Code of Laws, will cover any potential liability for the MUSC, SCDNR, and UCSC resulting in any way from the performance of this Agreement.

The Federal Tort Claims Act shall apply to any alleged tort act or omission committed by Federal personnel. NOS will not be responsible for instrumental or other equipment installed and operated by the other Cooperators. MUSC, SCDNR, and UCSC, as South Carolina governmental entities, are self-insured.

6. Other Party Occupancy. Occupancy of the MEHRL by any party other than the Cooperators' personnel or students, as recommended by the Science Board, will be subject to approval by the MEHRL Executive Board.

7. Equal Opportunity. During the performance of this Agreement, the Cooperators agree to comply with Federal and State laws regarding employment discrimination. To the extent that Federal law conflicts with state or local law, NOS and NIST must comply with Federal law.

8. **Clean Air and Water.** The Cooperators agree to comply with all applicable laws regarding the environment, including compliance with clean air and water standards, and all regulations and guidelines issued thereunder. To the extent that Federal law conflicts with State or local law, NOS and NIST must comply with Federal law.

9. **Disposal of Hazardous Material.** The Cooperators shall ensure that hazardous materials are stored, transported, and disposed in accordance with applicable Federal and State laws. To the extent that Federal law conflicts with State or local law, NOS and NIST must comply with Federal law. On this matter, all personnel must comply with policy guidance provided by the MEHRL Operational Committees and approved by the Laboratory Manager, the Science Board, and/or the MEHRL Executive Board. The Laboratory Manager, a NOS employee, specifically will be responsible for ensuring proper handling and disposal of hazardous materials.

10. **Authorized Personnel.** Personnel authorized to act on behalf of all the Cooperators will be identified in the Annual Operating Plan (AOP).

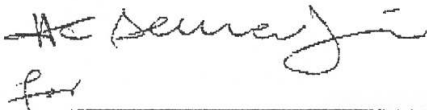
11. **Intellectual Property Rights.** It is the intent of the Cooperators, that they and other parties performing research at the MEHRL facility be able to apply for, hold, and negotiate patent license rights for the scientific and technological advances created pursuant to their joint research endeavors, to the extent authorized under Federal and/or State law. Approval of joint research and development projects, to be conducted under this agreement shall be formalized in subsequent agreements to be negotiated after the effective date of this Agreement. Intellectual property rights and obligations shall be determined in accordance with the terms and conditions negotiated in each of the subsequent agreements and in accordance with laws and regulations applicable to the parties, including, but not limited to, entering into Cooperative Research and Development Agreement, pursuant to 15 U.S.C. § 3710(a).

VIII EFFECTIVE DATE, AMENDMENT, AND TERMINATION

This Agreement will become effective upon the signature of the approving officials of the five Cooperators entering into this Agreement. This Agreement may be amended by the mutual written

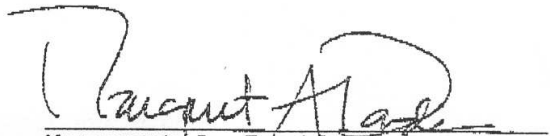
agreement of the Cooperators. The Cooperators anticipate that the U.S. Congress, which will provide broader statutory authority for activities under this Agreement, will pass specific legislation. In the event that such legislation is passed, the Cooperators agree to amend or supplement this Agreement in a manner consistent with the legislation. Subject to the conditions below, any Cooperator may withdraw from this Agreement by written notice 90 days in advance to all other Cooperators, however, subject to the availability of funds, NOS may not withdraw from this Agreement prior to the projected termination date of the established ground lease in 2047. No Cooperator may require any other cooperator to vacate the MEHRL premises except as provided elsewhere herein through the action of the MEHRL Executive Board.

APPROVED:


for


Raymond G. Kammer
Director
National Institute of
Standards and Technology

12/21/00
Date




Margaret A. Davidson
Acting Assistant Administrator
National Ocean Service

Date



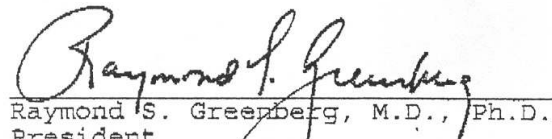
Paul A. Sandifer, Ph.D.
Director
South Carolina Department
of Natural Resources

Date


For Alexander M. Sanders, Jr.

Alexander M. Sanders, Jr.
President
University of Charleston,
South Carolina

12/21/2000
Date



Raymond S. Greenberg, M.D., Ph.D.
President
Medical University of
South Carolina

Date

MEHRL Organizational Chart

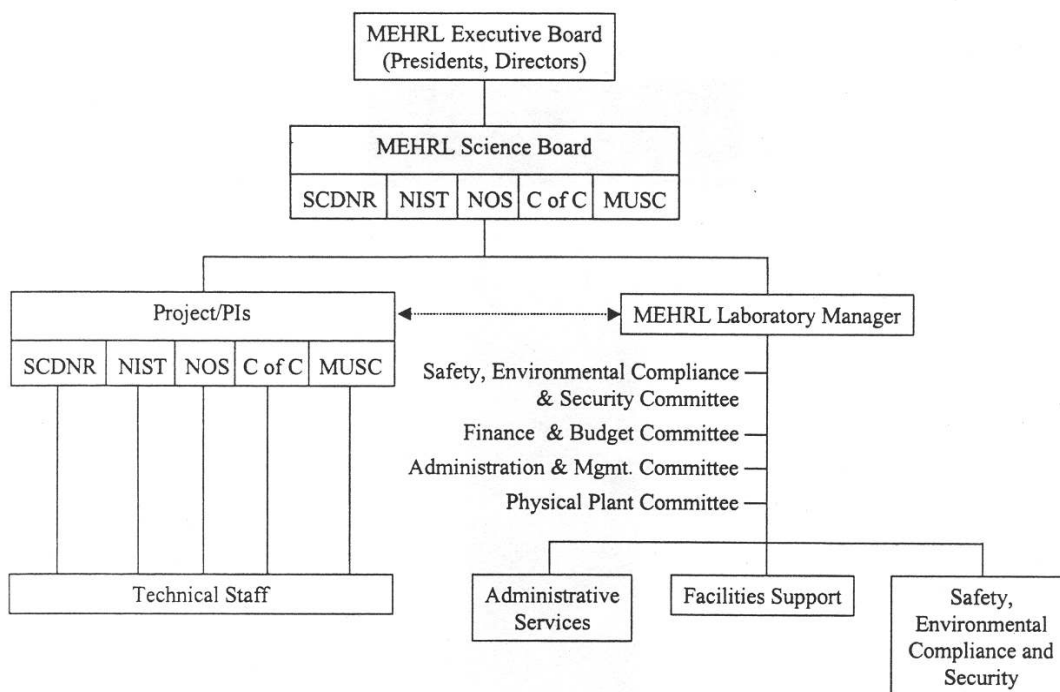


FIGURE 1.